



Visiting Professor Program Academic Year 2023/2024

TEACHING COMMITMENT: 30 hours

COURSE TITLE

Islands as Models to Study Biological Diversity and Socio-Ecosystems Resilience in a Changing World

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Conservation Zoology

LANGUAGE USED TO TEACH

English, French

COURSE SUMMARY

The course will first give an introduction to the importance of islands as natural laboratories to understand ecological and evolutionary processes that build up ecosystems and biological diversity. It will highlight the geographical characteristics of different island types, oceanic and continental (mountains, lakes, ...) and fragmented habitats functioning like islands. Because islands are particularly vulnerable to global changes and anthropogenic disturbances such as deforestation, defaunation, climate and land use changes, and biological invasions the second part of the course will deal with islands as models to better understand the drivers of global changes. We will analyse case studies from islands to address key issues like : the resilience of socio-ecosystems to natural disturbance like volcanism, hurricanes, drought and fire; the role of climatic fluctuations and human practices on land use changes; the impact of biological invasions and breakdown of geographic barriers.

LEARNING OBJECTIVES

The course will bring to students an overview of island characteristics and historical importance in humanities and sciences, with a pluri-disciplinary approach of its importance in literature, geography, sociology, economics and environmental sciences. The focus on islands as laboratories will help in explaining how global changes are working in synergia and how they are impacting societies and ecosystems. Based on regional case studies, the student will analyse some published documents of data set to propose solutions that can be developed to tackle the ongoing changes impacting societies and biological diversity on islands. Examples of concrete actions to restore ecosystems or prevent future negative impacts of the Anthropocene activities will be included in the discussion.

TUTORSHIP ACTIVITIES

N/A

LAB ACTIVITIES

N/A

OTHER ACTIVITIES BESIDES THE COURSE

3 seminars and 3 dissemination conference concerning:

- 1) Loss of plant-frugivores interactions negatively
 - 2) impact tropical forest recovery in the Southwest Indian Ocean
 - 3) Mascarene islands as a natural laboratory for studying biological diversity and socio-ecosystems
- Mass invasions of non-native species : implications for biodiversity and management issues at Reunion island

VISITING PROFESSOR PROFILE

High standard Professor expert in Conservation biology of tropical islands, with experience in interdisciplinary approach to global changes impacts and how they are impacting societies and ecosystems.

FURTHER INFORMATION

Lessons and seminars could be held in co-presence with UNITO Professors.

CONTACT REFERENT

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